

Clarendon District No. 1 Schoolhouse Inspection Report

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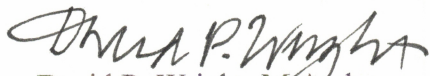
January 10, 2004

West Clarendon Church and Hall Association
c/o Max Carleton
120 McCarthy Lane
West Rutland, VT 05777

Dear Max,

As requested I visited the former schoolhouse at the corner of Quarterline Road and Firehouse Road in the Chippenhook area of Clarendon on November 20, 2003 with Bill Buschbaum, a volunteer with the local Boy Scout troop, which uses the building, to examine and document existing conditions of the building, and to prepare this diagnostic report. My findings are summarized below. Conditions reported are those available to visual inspection at the time of our visit. Please note that while this report contains recommendations for repairs, it is not a specification for bidding; specifications contain substantially more information on quantity, quality and materials that both assist and protect you and potential bidders in carrying out repairs to your historic building.

Sincerely,



David P. Wright, M Arch
Historic Preservation Consultant

This is a preliminary diagnostic report on conditions available to visual inspection at the time of our site visit; it is not a specification, and should not be used as a basis for contractor bids. Bid Documents contain substantially more information on quantities, standards, schedules, details and conditions of the work, which guide and protect both the Owner and the Contractor.

DESCRIPTION

The Clarendon District No. 1 Schoolhouse is a gable-roofed one story building measuring 28'-8" x 20'-7" with an 11'-6" x 17'-0" addition on the west end. A bank of 6/6 and 8/8 windows on the south side and a prominent tower with belfry clearly indicate the building's historic use as a district schoolhouse.

HISTORY

The Clarendon District No. 1 Schoolhouse originally stood a few hundred yards to the south on Quarterline Road, opposite the intersection with Walker Mountain Road. F.W. Beer's *Atlas of Rutland County, Vt.*, (Tuttle, 1869), shows a schoolhouse at that site which was probably renovated about 1880 in a style characterized by the authors of *The Historic Architecture of Rutland County* (Vt. Division for Historic Preservation, 1988) as Queen Anne-Vernacular. The building was moved to the present site in about 1980. Fire largely destroyed the rear addition in recent years. It has apparently been rebuilt on the original footprint. Old photographs might lend more information about the original appearance of the schoolhouse.

The building is owned by the West Clarendon Church & Hall Association and is currently used by the local troop of the Boy Scouts of America

The owners and users of the building would well advised to engage an architectural designer specializing in historic preservation to plan the interior renovations, clarify the code issues and guide the project. John Berryhill of NBF Architects in Rutland is experienced in this kind of project.

EXTERIOR

Roof

The roofs of the main building and the addition are covered with asphalt shingles in fair condition. There is no step flashing where the addition roofing meets the sheathing of the north wall of the main building. This may allow water to enter the building under certain weather conditions. When a new roof is needed, other roofing traditional materials more appropriate to the age of the building like cedar shingles, slate or standing seam steel should be considered.

The roofing of the belfry is cedar shingles in good condition. The step flashing at the base of the belfry has deteriorated on the south side allowing leaks that have caused damage visible in the schoolroom ceiling.

Chimney

While there is no chimney on the outside of the building, the chimney mass visible on the interior of the east gable wall has been truncated at the roof line. This chimney does not extend below the floor. The masonry part may, in fact, begin just below the thimble.

Woodwork

The woodwork on the exterior includes narrow clapboard siding on the original building and addition. The siding is in generally good condition for its age, with some decay and deterioration, most evident where the tower meets the roof. The west wall of the main building, above the addition roof, is unfinished and is missing sheathing, clapboards and trim as well as step flashing. This allows rain and snow as well as birds and animals to enter the building.

Corner boards, water table and window and door trim also shows deterioration and decay near the ground. Fascias and soffits are in poor condition, with missing pieces, decay at joints and inappropriate materials substituted. Only one of four cornice returns remains.

Doors and Windows

The **doors** on the east end of the building and the south side of the addition appear to be original. The east door, at least, is a good candidate for restoration. It needs a new latch of appropriate style. The south door could be replaced with a site built replica.

The steps at the south door are subjected to drainage from the roof that splashes back on the wall and doorsill, risking rot to the side of the building. They should be replaced with steps that are not attached to the building. A rain diverter should be installed in the roof shingles above the door to direct water to fall to the west side of the steps.

The **windows** in the building are confined to the south and east walls of the main building. The row of double hung windows on the south are in two groups flanking a post. To the west are two 6/6 windows and one 8/8 window, and to the east are three 6/6 and one 8/8. On the east wall are a single 6/6 adjacent to the door, and, on the other side of the chimney, two 6/6 windows.

All of the windows need new glazing compound and paint, and most appear structurally sound. Repairs or replication of parts of deteriorated sash could be contracted to David Sirjane of Shrewsbury, or Brandon Lumber and Millwork in Brandon.

These windows could be made more energy conserving by the addition of glass interior insulating sash, fabricated locally. Preservation Brief #9, *The Repair of Historic Windows*, is a good starting place for specifying repairs. The brief makes the case for retention of original windows while explaining the caveats applicable when considering replacement windows. Preservation Briefs are available from the National Park Service website, www2.cr.nps.gov/tps/briefs/presbhom.html.

While there is currently no central heating system in this building, one might be considered in the future. Preservation Brief #3, *Conserving Energy in Historic Buildings*, details ways to lower energy consumption in historic buildings, including window treatments that retain historic features. The Vermont Division for Historic Preservation can recommend consultants to analyze energy use and recommend heating, lighting and insulation systems compatible with retention of historic architectural features.

Paint

The building has been recently painted in colors reasonably appropriate to the style and vintage of the building. Contrasting trim color on the corner boards, fascias, door and window trim and other features successfully bring out the modest architectural detail of this building, improving the overall balance.

For future repainting of the building, consideration should be given to the original color scheme which could be determined by analyzing what minute remnants exist in cracks and inaccessible places or on the lowest layers of paint chips scraped from the building. An expert at this historic analysis is Leonard Spencer of Cabot, who is also an extremely capable and competitively priced painting contractor. A local painting contractor with considerable experience in historic paint restoration is Betti Jaquay of Tinmouth.

Paint failure, especially with cheap water based paints, is a common problem, underscoring the need for careful preparation and use of the best possible materials, including caulks, primers and finish coats. The causes of and responses to paint failure are well-described in Preservation Brief #10: *Exterior Paint Problems on Historic Woodwork*, which should be used as a guideline in addressing paint repairs.

Skilled prep work is 90% of the success of a paint job. There are also new paints on the market which extend the cycle of repainting by several years (www.fine-paints.com; 1(800) 332-1556). Although the materials are more expensive, most of the cost of painting is in labor. Extending the cycle can bring a substantial net gain.

Foundation

The schoolhouse sits on poured concrete foundation which dates to the time the building was moved to the site. The basement appears to be reasonably dry, with some minor leaking. Staining from dampness was evident where wooden posts contacted the concrete slab floor; there was no obvious sign of flooding. Bill Buschbaum pointed out where repairs had been made to a crack in the wall where the addition joins the main building. Surface water had been leaking at this point and the repair with hydraulic cement had apparently been successful. Some settlement of earth used to backfill around the foundation is evident allowing water draining from the roof to collect. Depressions should be filled so that the earth slopes consistently away and drains water from the foundation.

Site

The building sits on a lot at the corner of two paved town roads. The site slopes away from the building in all directions. The soil is grass covered and appears to be well-drained. An informal driveway approaches the building from Quarterline Road.

INTERIOR

The interior of the building retains strong evidence of its earlier use as a school and indications of modifications that were made with changes of use and as the result of a fire.

Entering the original building from the east door reveals the **Schoolroom**, measuring approximately 20' x 28'. The post and beam structure of this part of the building is revealed by posts at the approximate mid-point of the south and north walls and in the northwest corner of the room. The other corner posts are concealed by semi-circular plaster and lath wall sections.

Elsewhere on the walls, original 1x6, tongue and groove, finish boards cover areas below and between the windows on the east and south walls, and above between and behind blackboards on the west and north walls. The boards are applied vertically in the west end of the room and horizontally in the east end, suggesting that they might have been installed at different times.

Modern drywall covers the trapezoidal areas in the gable ends as well as the ceiling, apparently covering original plaster and lath. This drywall needs tape and joint compound. Evidence of a former doorway to the back room of the building is visible in the northwest corner. An existing doorway connects to the back room from the southwest corner.

The floor of the schoolroom is covered with 1x4 tongue & groove maple flooring. A tinned metal sheet nailed to the floor in the northeast corner probably indicates the location of a wood heating stove.

It appears that the ceiling of the schoolroom was raised from its original place as part of the post and beam frame. A beam probably spanned between the two plates above the posts at the center of the north and south walls. Other beams may have run parallel to these on either side. Or joists may have been installed perpendicular to the center beam and the north and south end plates in a pattern similar to the framing of the schoolroom floor (visible in the basement). A lath and plaster ceiling may have been attached to the bottom of this framework.

The raised ceiling was attached the underside of collar ties nailed to the sides the roof rafters. Removal of the beam(s) connecting the plates has allowed the walls to bow out under the weight of the roof and snow loads. The bowing is more noticeable on the south wall which was further weakened by the window penetrations in the vertical plank wall sheathing. The bowing of the north and south walls can be straightened or at least secured by installation of three or more steel rods and turnbuckles to connect the north and south plates. Holes would be drilled in the plates at corresponding places on the north and south walls, and the rods would be installed with nuts and washers on the outside of the walls. The turnbuckles would then be tightened to draw together and secure the walls.

The exterior walls and roof of the **Addition room** have been largely reconstructed to repair damage from a "recent" fire. Charred sheathing is visible in this room on the outside of the schoolroom structure. It is difficult to tell much about the earlier use of this room from its present condition, but it likely was used for storage of firewood, etc., and may have included a privy, although there may have been a separate outhouse privy on the original site. A door leads outdoors from the southeast corner of this room. A stair along the west wall leads to the basement. Another stairwell opening has been framed along the north wall for the anticipated relocation of the stairs.

The **Basement** is spacious and relatively dry with concrete walls and floor. Screw jack posts under a 3x8 beam help support the floor of the schoolroom which is framed from hand hewn beams and log joists. The Scouts have contemplated finishing the basement to provide meeting space, but that sort of use might be limited by lack of a second egress. An areaway entrance with a Bilco-type hatchway might satisfy the need for a second egress.

Utilities

The building currently has no electricity, no heating system, no running water or septic system. The Scouts have been heating the building occasionally with kerosene space heaters.

Consideration should be given in the design process to determining what utilities are necessary and reasonable for this building, based on budget and on anticipated use.

Electricity, for instance would seem to be important for construction work, for safe use of the building in the evening, and to power appliances such as a dehumidifier, an alarm system, or an alternative (composting) toilet.

The cost of drilling a well and water might be prohibitive, especially considering how little use it would get. It would also require heating in the building if it were to be available in the winter.

A central heating system might be reasonable even for occasional use if its costs were amortized over several years.

A conventional in-ground septic system might be an unreasonable expense due to limited use and in the absence of a water system. A chemical or composting toilet might make more sense for limited occasional use.

Similar design considerations based on economics and use and State regulations will influence the planning of the Addition room and the basement.

PRESERVATION STRATEGIES AND COSTS

Repairs are ranked below in order of priority . It is also recommended that least a 20% contingency be carried for portions of the work to be done where conditions cannot be seen in a non-destructive investigation such as this one. Use of contractors skilled and experienced in preservation work will help to manage discovered conditions and insure that proper consideration is given to materials, practices and preservation concerns; this is usually the most cost-effective approach and protects the integrity of the building, including its eligibility for preservation funding.

Local contractors to consider include Dan McKeen, d.b.a *Green Mountain Timber Frames*, Middletown Springs, and Doug Fontein, d.b.a. *Tinmouth Channel Construction*, Tinmouth.

This opinion of probable cost addresses historic preservation issues; it is not based on full research, specifications or details, and should be considered advisory only. Costs are based on hired labor and new materials, both at market rates, taking into account special contractor expertise as required. Some tasks could be done by semi-skilled volunteer labor, which can count as credit toward grants which require a match.

Tasks listed as Lower Priority are speculative, depending on the results of a renovation program developed in the Design process.

High Priority

Design services	\$1000
Install three steel rods and turnbuckles between wall plates	1,500
Finish west wall above Addition with clapboards, flashing	1,000
Repairs and replace fascias, soffits, and 3 cornice returns	1,000
Replace door steps at south door, install rain diverter	500
Regrade earth around foundation	500
Paint new woodwork and touch up exterior paint	500
Replace flashing and repair clapboards on belfry	<u>500</u>
Subtotal:	\$6,500

Medium Priority

Replace roofing with cedar, approx. 20 squares @ 350	\$7,000
Exterior wood repair - corner boards, clapboards, doors	1,000
Electrical service and breaker panel	1,200
Basic wiring for lights and outlets	2,000
Restore chimney for use with wood stove	1,000
Drywall repair and taping and painting in schoolroom	1,000
Sash conservation & painting: 10 windows @ \$250	2,500
Interior storm window: 10 @ \$200	<u>2,000</u>
Subtotal:	\$17,700

Lower Priority

Areaway and hatchway to basement	\$3,000
New enclosed interior stair case to basement	1,000
Chemical toilet	1,000
Insulation, blown-in cellulose	4,000
Interior finish in addition room: framing, drywall, paint	3,000
Hot air, propane fired heating system (no chimney needed)	<u>8,000</u>
Subtotal:	\$20,000
Total:	\$44,200

CONCLUSION

This simple one room schoolhouse is elevated in importance as one of the few historic buildings in this part of Clarendon, and by its proximity to the Clarendon Springs Historic District. It is one of six Chippenhook buildings listed on the Vermont State Register of Historic Places in 1988. One of these buildings, the stone mill building, has since been demolished.

The fact that the schoolhouse building was moved from its original site may limit its eligibility for certain preservation grants

One challenge in preserving the building will be in finding compatible adaptive uses that does not overwhelm or contradict its simplicity. The Boy Scouts seem a good fit as tenants and partners in the restoration with potential for fund raising and sweat equity labor, already evident in the recent repairs to the building.

Important sources of information for understanding the reasons and methods of historic preservation are found in the *Preservation Briefs* from the National Park Service mentioned above, and in the *Secretary of the Interior's Standards*, also in the N.P.S. website @ www2.cr.nps.gov/tps/secstan1.htm.

Other considerations may arise in planning for the adaptation of this building to new use. Please contact me if you have questions on any of the above, or need additional information or assistance in ongoing restoration work.

I am pleased to have had this opportunity to assist you in preserving this significant historic resource.

Sincerely yours,



David P. Wright

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